

1 **Bacterial Sexually Transmitted Infections among HIV-infected Participants in the US:**
2 **Estimates from the Medical Monitoring Project**

3
4 **Supplementary Material**

5
6
7 Multiple comparison procedures are used to adjust statistical significance levels to account for
8 all data comparisons conducted or anticipated in an analysis. The Bonferroni multiple
9 comparison method may be used for any sets of pairwise or linear combinations specified by
10 the analyst, and are appropriate for equal and unequal sample sizes [1]. For the estimates
11 shown in Table 2, three comparisons were conducted separately for receipt of at least one BSTI
12 test and for repeat BSTI testing, for each BSTI (syphilis, gonorrhea, and chlamydia).
13 Comparisons were made across each category of gender/sexual orientation (gay, bisexual, and
14 other men who have sex with men [MSM] vs. men who have sex with women only [MSW], MSM
15 vs. women, and MSW vs. women) within each category of sexual risk (all HIV-infected
16 participants, participants reporting no sexual activity, participants reporting any sexual activity,
17 and participants at elevated sexual risk). For receipt of at least one syphilis test and for repeat
18 syphilis testing within each sexual risk category, a Bonferroni-adjusted significance threshold of
19 $P \leq 0.017$ ($P \leq 0.05/3$) was used. Because orders for gonorrhea and chlamydia tests are likely to
20 be highly correlated, an adjusted significance threshold of $P \leq 0.008$ ($P \leq 0.05/6$) was used for
21 those comparisons.

22
23 For the estimates shown in Tables 3 and 4, eight comparisons were conducted separately for
24 each BSTI within each category of gender/sexual orientation (MSM, MSW, and women) for
25 those reporting any sexual activity (Table 3) and those at elevated sexual risk (Table 4) (e.g.,
26 receipt of repeat syphilis tests among MSM for Hispanics vs. non-Hispanic whites at elevated
27 risk), resulting in a Bonferroni-adjusted significance threshold of $P \leq 0.006$ ($P \leq 0.05/8$) for these
28 comparisons. For gonorrhea and chlamydia comparisons, we used a Bonferroni-adjusted
29 significance threshold of $P \leq 0.003$ ($P < 0.05/16$) to account for correlation between orders for

30 these tests. We also conducted 24 comparisons across gender/sexual orientation category
31 within each demographic/other factor level for each BSTI (e.g., receipt of at least one syphilis
32 test for sexually-active Hispanic MSM vs. Hispanic MSW), resulting in a Bonferroni-adjusted
33 significance threshold of $P \leq 0.002$ ($P \leq 0.05/24$) for syphilis; for gonorrhea and chlamydia,
34 $P \leq 0.001$ ($P \leq 0.05/48$) was used to account for correlations in orders for these tests.

35

36 **Reference**

- 37 1. Neter J, Wasserman W, Kutner MH. Applied Linear Statistical Models. Chapter 5:
38 Simultaneous inferences and other topics in regression analysis - I. 2nd ed. Homewood, IL:
39 Richard D. Irwin, Inc.; 1985.